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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/788,596	02/27/2004	Dale A. Sather	M1103.70668US00	6817
45840 7590 03/16/2010 WOLF GREENFIELD (Microsoft Corporation) C/O WOLF, GREENFIELD & SACKS, P.C. 600 ATLANTIC AVENUE BOSTON, MA 02210-2206				
EXAMINER CAO, DIEM K				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/788,596

Applicant(s)

SATHER ET AL.

Examiner

DIEM K. CAO

Art Unit

2194

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 March 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 27-32, 34 and 41-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 27-32, 34 and 41-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB06)
Paper No(s)/Mail Date 3/22/2010
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-10, 27-32, 34 and 41-54 are pending. Applicant has amended claim 27.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/2/2010 has been entered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 7,316,022 B2) in view of Howard et al. (US 6,823,526 B2).**

As to claim 1, Nishio teaches a network device interaction system (abstract) comprising:

a registry (inherent from a client PC; see Fig. 1); and

a processor configured to execute a plurality of software components (CPU ... modules

1-8; col. 4, lines 33-46), the component comprising:

an application component (application) that seeks to utilize a network device (when the user selects and designates a desired printer name on the list; col. 8, lines 7-8 and when printing a document created by an application running on the client, user wants to print data using a printer ... to the network; col. 5, lines 24-25, lines 39-42); and

a configuration component (the automatic driver down-loader/configurator 100 in the application 1 is activated; col. 5, lines 47-49) that automatically configures the network device to operate with the application component (When the user select ... installs the drivers; col. 8, lines 7-18) by:

receiving metadata for identifying the network device, the metadata comprising a hardware identifier for the network device (When the user selects ... converts the device ID; col. 8, lines 7-11 and Fig. 6);

determining configuration information using the hardware identifier for the network device (device driver, printer IP address, device number; col. 8, lines 11-21. Since the response sent back include multiple printers, the device ID must be used to extract and obtain the correct configuration information for the printer that is selected from the user from the list of multiple printers), the configuration information indicating a configuration of the network device (col. 7, lines 16-29), the configuration information comprising one or more registry keys (IPAddress, Driver-Version, DriverURL, PrinterLocation; col. 7, lines 16-29); and

configuring the system with the configuration information in association with the hardware identifier (col. 9, lines 30-40 and lines 59-66).

Nishio does not explicitly teach the configuring comprising setting the registry with the one or more registry keys from the configuration information. However, Howard teaches wherein configuration of the system further comprises setting one or more registry keys (The operating system ... in the registry; col. 7, lines 13-24, col. 8, lines 5-26).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to apply the teaching of Howard to the system of Nishio because Howard teaches in details how the system installs a device driver to use with external device.

As to claim 2, Nishio teaches wherein the configuration information further comprises a device driver associated with the network device (Driver URL; col. 7, lines 28-29), and configuration the system comprises loading a driver associated with the device (The application 1 searches a driver database ... the application 1 installs the driver; col. 8, lines 11-18).

As to claim 3, Nishio does not teach wherein configuring the system comprises setting the registry with the one or more registry keys, the one or more registry keys indicating a user preference.

However, Howard teaches wherein configuring the system comprises setting the registry with the one or more registry keys (The operating system ... in the registry; col. 7, lines 13-24, col. 8, lines 5-26), the one or more registry keys indicating a user preference (col. 7, lines 15-35).

See rejection of claim 1 for reason to apply the teaching of Howard to the system of Nishio.

As to claim 4, Nishio teaches wherein the device driver is loaded from a local data store (a driver database managed by the client OS; col. 8, lines 11-15).

As to claim 5, Nishio teaches wherein the device driver is downloaded over the Internet (Driver URL ... a storage device of a server on the network; col. 7, lines 28-35).

As to claim 6, Nishio teaches wherein the device driver is received from the network device (A configurator 7 executes the installation of a driver obtained from the printer; col. 4, lines 3-4 and The driver URL can be a URL to the printer; col. 11, lines 12-19).

As to claim 7, Nishio teaches wherein the device driver is retrieved from a computer readable medium (a driver database managed by the client OS; col. 8, lines 11-15).

As to claim 8, Nishio teaches wherein the device driver is retrieved from a computer over a local area network (Driver URL ... a storage device of a server on the network; col. 7, lines 28-35).

5. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 7,316,022 B2) in view of Howard et al. (US 6,823,526 B2) further in view of Chiles et al. (US 6,581,157 B1).

As to claim 9, Nishio does not teach wherein configuration of the network device further comprises updating device firmware to a newer firmware version packaged with the device driver. However, Chiles teaches wherein configuration of the device further comprises updating device firmware to a newer firmware version packaged with the device driver (col. 1, lines 51-63, col. 6, lines 59-64 and col. 7, lines 28-35). It would have been obvious to one of ordinary skill in the art, at the time the invention was made to apply the teaching of Chiles to the system of Nishio because Chiles teaches a method for updating a memory image in a non-volatile programmable memory in a device, so the device can provide new features and functions (col. 3, lines 36-38 and col. 6, line 59-64).

As to claim 10, Nishio does not teach wherein configuration of the network device further comprises writing a copy of a most recent or current device driver package onto the network device. However, Chiles teaches wherein configuration of the network device further comprises writing a copy of a most recent or current device driver package (col. 6, lines 42-45 and col. 7, line 19-25). Although Chiles does not teach on the network device, Nishio teaches the driver can be maintained in the network device (A configurator 7 executes the installation of a driver obtained from the printer; col. 4, lines 3-4 and The driver URL can be a URL to the printer; col. 11, lines 12-19). It would have been obvious to one of ordinary skill the art, the drive package in the device would be updated to reflect the change of the device. See claim 9 above for reason to apply the teaching of Chiles to the system of Nishio.

6. Claims 53 and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 7,316,022 B2) in view of Howard et al. (US 6,823,526 B2) further in view of Meenan et al. (US 7,283,505 B1).

As to claim 53, Nishio does not teach the configuration component is further configured to associate the network device with at least one other network device at least by authenticating the network device with respect to the at least one other network device using a credential.

However, Meenan teaches associating the network device with the at least one other network device at least by authenticating the network device with respect to at least one other network device using a credential (col. 18, lines 14-21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Meenan to the system of Nishio because Meenan teaches a method that allows only identified devices to be connected and operated in a secured network, thus, avoid problems from untrusted devices.

As to claim 54, see rejections of claims 1, 2 and 53.

7. Claims 27-32, 34, and 41-49 and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 7,316,022 B2) in view of Meenan et al. (US 7,283,505 B1).

As to claim 27, Nishio teaches a method of configuring a network device on a network for use with at least one other network device installed on the network (col. 5, lines 24-26, and lines 39-46), the comprising:

associating the network device with the at least one other network device (a print setup window ... a printer selection box; col. 5, lines 19-23 and lines 50-57);

locating a driver component associated with the network device (the application 1 searches a driver database managed by the client OS for a corresponding driver; col. 8, lines 11-13);

retrieving the driver component (inherent from “the application 1 installs the driver”; col. 8, lines 17-18 or obtaining the driver from a predetermined storage region of a storage device of a server on the network; col. 7, lines 30-35, and the system installer 1009 obtains the printer driver stored in the ... client PC; col. 9, lines 59-62); and

loading the driver component to facilitate installation of the network device (the application 1 installs the driver”; col. 8, lines 17-18 and installs the printer driver in the driver memory 1004; col. 9, lines 62-63).

Nishio does not teach authenticating the network device with respect to at least one other network device using a credential, in response to authenticating the network device, storing information for re-authenticating the network device, detecting that the network device is not longer on the network, and using the stored information for re-authenticating the network device to automatically re-associated the network device with the at least one other network device when the network device is reconnected to the network. However, Meenan teaches associating the network device with the at least one other network device at least by authenticating the

network device with respect to at least one other network device using a credential (col. 9, lines 17-65) , in response to authenticating the network device, storing information for re-authenticating the network device (The client device may obtain authentication information ... through the access of authentication information stored on the home network; col. 9, lines 26-33. Thus, the authentication information was entered by a user from previous time was stored/saved at the home network), detecting that the network device is not longer on the network (inherent from "the other devices, such as a laptop computer 112f and a PDA 112g ... wireless device"; col. 4, lines 11-15. Those devices do not connected to the home network all the time, the devices can be disconnected or power down. Thus, those time the network device is no longer on the network), and using the stored information for re-authenticating the network device to automatically re-associated the network device with the at least one other network device when the network device is reconnected to the network (The client device may obtain authentication information ... through the access of authentication information stored on the home network; col. 9, lines 26-33).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Meenan to the system of Nishio because Meenan teaches a method that allows only identified devices to be connected and operated in a secured network, thus, avoid problems from untrusted devices.

As to claim 28, Nishio teaches wherein the at least one other network device is a personal computer (personal computer; col. 5, lines 25-26).

As to claim 29, Nishio teaches wherein locating a driver component comprises searching a local data store of the computer (The application 1 searches a driver database ... the application 1 installs the driver; col. 8, lines 11-18).

As to claim 30, Nishio teaches wherein locating a driver component comprises searching a remote server (Driver URL ... a storage device of a server on the network; col. 7, lines 28-35 and the system installer 1009 obtains the printer driver stored in the external memory of the file server 1010; col. 9, lines 59-61).

As to claim 31, Nishio teaches wherein searching a remote server is accomplished over the Internet (inherent from Driver URL ... a storage device of a server on the network; col. 7, lines 28-35).

As to claim 32, Nishio teaches wherein the driver component is retrieved from the network device (A configurator 7 executes the installation of a driver obtained from the printer; col. 4, lines 3-4 and The driver URL can be a URL to the printer; col. 11, lines 12-19).

As to claim 34, it is the same as the method claim of claim 27 except this is a computer readable medium claim, and is rejected under the same ground of rejection.

As to claim 41, Nishio does not teach wherein the credential is an identification string and authenticating comprises receiving the credential through a user interface. However, Meenan

teaches wherein the credential is an identification string and authenticating comprises receiving the credential through a user interface (col.19, lines 29-30). See rejection of claim 27 for reason to apply the teaching of Meenan to the system of Nishio.

As to claim 42, Nishio does not teach the credential is a certificate-based credential and authenticating comprises employing the certificate-based credential. However, Meenan teaches the credential is a certificate-based credential and authenticating comprises employing the certificate-based credential (col. 19, lines 38-46). See rejection of claim 27 for reason to apply the teaching of Meenan to the system of Nishio.

As to claim 43, Nishio as modified by Meenan teaches establishing a secure, authenticated communications channel (see Meenan: col. 6, lines 31-41).

As to claim 44, Nishio as modified by Meenan teaches encrypting communications between the network device and the at least one other network device over the communications channels (see Meenan: col. 6, lines 44-57).

As to claim 45, Nishio teaches receiving metadata from the network device, wherein the metadata is used in locating the driver component associated with the network device (col. 7, lines 6-15 and lines 28-35).

As to claim 46, Nishio teaches detecting the network device on the network (col. 5, lines 50-53).

As to claim 47, Nishio teaches wherein detecting comprises searching for the network device utilizing Simple Service Discovery Protocol (SSDP) (col. 5, lines 53-55).

As to claim 48, Nishio does not teach detecting comprises searching for the network device utilizing Web Services Discovery Protocol. However, Nishio teaches the search request is not limited to the SSDP search (col. 5, lines 53-55). It would have been obvious to one of ordinary skill in the art that different search technique, such as Web Service Discover Protocol can be utilized in the system of Nishio.

As to claim 49, Nishio does not teach detecting comprises passively receiving a notification from the network device that it is connected to the network. However, Meenan teaches detecting comprises passively receiving a notification from the network device that it is connected to the network (col. 19, lines 16-25). See rejection of claim 27 for reason to apply the teaching of Meenan to the system of Nishio.

As to claim 52, Nishio as modified by Meenan teaches storing the credential on a computer-storage medium (col. 19, lines 41-45, i.e., the security code must be stored in order to be retrieved and compared).

8. Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 7,316,022 B2) in view of Meenan et al. (US 7,283,505 B1) further in view of Chiles et al. (US 6,581,157 B1).

As to claim 50, see rejection of claim 9 above.

9. Claim 51 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nishio (US 7,316,022 B2) in view of Meenan et al. (US 7,283,505 B1) further in view of Howard et al. (US 6,823,526 B2).

As to claim 51, Nishio does not teach setting one or more registry keys with configuration information for the network device.

However, Howard teaches wherein configuration of the system further comprises setting one or more registry keys for the network device (The operating system ... in the registry; col. 7, lines 13-24, col. 8, lines 5-26).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made to apply the teaching of Howard to the system of Nishio because Howard teaches in details how the system installs a device driver to use with external device.

Response to Arguments

10. Applicant's arguments with respect to claims 271-10, 27-32, 34 and 41-54 have been considered but are moot in view of the new ground(s) of rejection.

Although the same references are applied, the mapping has been changed.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIEM K. CAO whose telephone number is (571)272-3760. The examiner can normally be reached on Monday - Friday, 7:30AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DIEM K CAO/
Primary Examiner
Art Unit 2194

DC
March 12, 2010